

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle 5755 8th Street East Tacoma, WA 98424 Tel: (253)922-2310

TestAmerica Job ID: 580-44461-1 Client Project/Site: Clean Harbors

For:

ISI Environmental Services 215 S Laura Wichita, Kansas 67211

Attn: Brady Gerber

Kim hesley

Authorized for release by: 7/21/2014 12:00:21 PM
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ISI Environmental Services Project/Site: Clean Harbors TestAmerica Job ID: 580-44461-1

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Case Narrative

Client: ISI Environmental Services Project/Site: Clean Harbors TestAmerica Job ID: 580-44461-1

Job ID: 580-44461-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The sample was received on 7/15/2014 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice.

The temperature of the cooler at receipt was 2.1° C.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

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Definitions/Glossary

Client: ISI Environmental Services

TestAmerica Job ID: 580-44461-1

Project/Site: Clean Harbors

Glossary

RPD

TEF

TEQ

| Abbreviation | These commonly used abbreviations may or may not be present in this report. |
|----------------|---|
| α | Listed under the "D" column to designate that the result is reported on a dry weight basis |
| %R | Percent Recovery |
| CFL | Contains Free Liquid |
| CNF | Contains no Free Liquid |
| DER | Duplicate error ratio (normalized absolute difference) |
| Dil Fac | Dilution Factor |
| DL, RA, RE, IN | Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample |
| DLC | Decision level concentration |
| MDA | Minimum detectable activity |
| EDL | Estimated Detection Limit |
| MDC | Minimum detectable concentration |
| MDL | Method Detection Limit |
| ML | Minimum Level (Dioxin) |
| NC | Not Calculated |
| ND | Not detected at the reporting limit (or MDL or EDL if shown) |
| PQL | Practical Quantitation Limit |
| QC | Quality Control |
| RER | Relative error ratio |
| RL | Reporting Limit or Requested Limit (Radiochemistry) |

Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44461-1

Client Sample ID: J7-F1-12'

Lab Sample ID: 580-44461-1

07/16/14 11:57

Date Collected: 07/14/14 11:45

Percent Moisture

Matrix: Solid Percent Solids: 77.2

Date Received: 07/15/14 09:30

| Analyte | Result | Qualifier | RL | MDL | Unit | D | Prepared | Analyzed | Dil Fac |
|-------------------------------|-----------|-----------|----------|-----|-------|---|----------------|----------------|---------|
| Dalapon | ND ND | | 32 | | ug/Kg | ₩ | 07/16/14 09:31 | 07/17/14 18:01 | 1 |
| Surrogate | %Recovery | Qualifier | Limits | | | | Prepared | Analyzed | Dil Fac |
| 2,4-Dichlorophenylacetic acid | 81 | | 51 - 129 | | | | 07/16/14 09:31 | 07/17/14 18:01 | 1 |
| General Chemistry | | | | | | | | | |
| Analyte | Result | Qualifier | RL | RL | Unit | D | Prepared | Analyzed | Dil Fac |
| Percent Solids | 77 | | 0.10 | | % | | | 07/16/14 11:57 | 1 |

0.10

23

%

TestAmerica Job ID: 580-44461-1

Client: ISI Environmental Services Project/Site: Clean Harbors

Analysis Batch: 164220

Matrix: Solid

Method: 8151A - Herbicides (GC/MS)

Lab Sample ID: MB 580-164083/1-A

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 164083

Prep Type: Total/NA

мв мв Result Qualifier RL MDL Unit Dil Fac Analyte D Prepared Analyzed 25 07/16/14 09:31 07/17/14 15:21 Dalapon ND ug/Kg

MB MB

Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 51 - 129 07/16/14 09:31 07/17/14 15:21 2,4-Dichlorophenylacetic acid 112

Lab Sample ID: LCS 580-164083/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 164220

Prep Batch: 164083 LCS LCS Spike Added Result Qualifier Unit Limits %Rec 36 667 240 ug/Kg 23 - 117

LCS LCS

Surrogate %Recovery Qualifier Limits 51 - 129 2,4-Dichlorophenylacetic acid 112

Lab Sample ID: LCSD 580-164083/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Analyte

Dalapon

Analyte

Dalapon

Analysis Batch: 164220

Prep Batch: 164083 LCSD LCSD Spike %Rec. RPD Added Result Qualifier RPD Unit D %Rec Limits Limit 667 264 40 23 - 117 10 ug/Kg

LCSD LCSD Surrogate %Recovery Qualifier Limits

2,4-Dichlorophenylacetic acid 106 51 - 129

Method: D 2216 - Percent Moisture

Lab Sample ID: 580-44461-1 DU Client Sample ID: J7-F1-12'

Matrix: Solid

Analysis Batch: 164104

Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier Unit RPD Limit D Percent Solids 77 76 % 20 % Percent Moisture 23 24 3 20

TestAmerica Seattle

7/21/2014

Prep Type: Total/NA

Lab Chronicle

Client: ISI Environmental Services

Project/Site: Clean Harbors

TestAmerica Job ID: 580-44461-1

Lab Sample ID: 580-44461-1

Percent Solids: 77.2

Client Sample ID: J7-F1-12' Date Collected: 07/14/14 11:45 Matrix: Solid Date Received: 07/15/14 09:30

| | Batch | Batch | | Dilution | Batch | Prepared | | |
|-----------|----------|--------|-----|----------|--------|----------------|---------|---------|
| Prep Type | Type | Method | Run | Factor | Number | or Analyzed | Analyst | Lab |
| Total/NA | Prep | 8151A | | | 164083 | 07/16/14 09:31 | RBD | TAL SEA |
| Total/NA | Analysis | 8151A | | 1 | 164220 | 07/17/14 18:01 | ERB | TAL SEA |
| Total/NA | Analysis | D 2216 | | 1 | 164104 | 07/16/14 11:57 | DDM | TAL SEA |

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44461-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

| Authority | Program | EPA Region | Certification ID | Expiration Date |
|---------------|---------------|------------|------------------|------------------------|
| Alaska (UST) | State Program | 10 | UST-112 | 05-27-15 |
| California | NELAP | 9 | 01115CA | 01-31-14 * |
| California | State Program | 9 | 2901 | 01-31-15 |
| L-A-B | DoD ELAP | | L2236 | 01-19-16 |
| L-A-B | ISO/IEC 17025 | | L2236 | 01-19-16 |
| Montana (UST) | State Program | 8 | N/A | 04-30-20 |
| Oregon | NELAP | 10 | WA100007 | 11-06-14 |
| USDA | Federal | | P330-11-00222 | 04-08-17 |
| Washington | State Program | 10 | C553 | 02-17-15 |

 $[\]ensuremath{^{\star}}$ Certification renewal pending - certification considered valid.

Sample Summary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44461-1

| Lab Sample ID | Client Sample ID | Matrix | Collected | Received |
|---------------|------------------|--------|----------------|----------------|
| 580-44461-1 | J7-F1-12' | Solid | 07/14/14 11:45 | 07/15/14 09:30 |

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Seattle/Tacoma 5755 8th Street East

Chain of Custody Record

| 2 3 4 5 6 7 8 | 9 10 11 | | | | |
|---|---------------------------------|--|--|--|--------------------------------------|
| Seattle/Tacoma | | | | | ToctAmorica |
| 5755 8th Street East | | Chain | Chain of Custody Record | | THE LEADER IN ENVIRONMENTAL TESTING |
| Facoma, WA 98424 bhone 253.922.2310 fax 253.922.5047 | | | | | TestAmerica Laboratories, Inc. 2 |
| Client Contact | Project Manager: Don Oc | Treated Si | Site Contact: Date: | e: | COC No: |
| Si Environmental | 264-1 | | | Carrier: | 1 of1 COCs |
| 215 South Laura | | | | | Job No. |
| Nichita KS 67211 | Calendar (C) or Work Days (W) | W | | | |
| 316) 264-7050 | TAT if different from Below | | | | ١. |
| xxx) xxx-xxxx FAX | 2 weeks | | | | SDG No. |
| Clean Harbors | 1 week | P. Sur | | | |
| Site: Wichita, KS | | | | | |
| 00# | 1 day | inpl | | | |
| | Sample | ## ################################### | alapon | | Complete Nitro |
| 72 - 121 | 7-14 11 1145 6 | - 11 | | | |
| | 5 | - | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | Page |
| | | | | 580-4446 Chain of Custody | |
| | | | | HEDEX PO | |
| | | | | Cooler/B Dig/ | Cooler/B Dig/IR cor 2. \ mc 1.4 |
| | | | | Cooler Dsc swy | Antico O Lah |
| | | | | Well/Packs Pa | Packing bubble |
| Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other | aOH; 6= Other | | | | |
| Possible Hazard Identification Non-Hazard Flammable Stin Irritan | Poison B Unknown | | Sample Disposal (A fee may be assumed Feetum To Client Disp | fee may be assessed if samples are retained longer than 1 month) | d longer than 1 month) |
| ns/QC Requirements & Com | | | | ì | i |
| incutshed by: | Componer | | Pacaissed hy: | Componer | Total Final |
| Relinquished by: | Company: Company: | Date/Time: 7-/4//////CO Date/Time: | Received by: | Company: Company: | Date/Time: 7/15/14 0930 Date/Time: |
| Relinquished by: | Сотрапу: | Date/Time: | Received by: | Сотрапу: | Date/Time: |
| | | | | _ | • |

Form No. CA-C-WI-002, dated 04/07/2011

Login Sample Receipt Checklist

Client: ISI Environmental Services Job Number: 580-44461-1

Login Number: 44461 List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

| Creator. Diankinship, Tolli X | | |
|--|--------|---------|
| Question | Answer | Comment |
| Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td> | True | |
| The cooler's custody seal, if present, is intact. | True | |
| Sample custody seals, if present, are intact. | True | |
| The cooler or samples do not appear to have been compromised or tampered with. | True | |
| Samples were received on ice. | True | |
| Cooler Temperature is acceptable. | True | |
| Cooler Temperature is recorded. | True | |
| COC is present. | True | |
| COC is filled out in ink and legible. | True | |
| COC is filled out with all pertinent information. | True | |
| Is the Field Sampler's name present on COC? | False | no |
| There are no discrepancies between the containers received and the COC. | True | |
| Samples are received within Holding Time. | True | |
| Sample containers have legible labels. | True | |
| Containers are not broken or leaking. | True | |
| Sample collection date/times are provided. | True | |
| Appropriate sample containers are used. | True | |
| Sample bottles are completely filled. | True | |
| Sample Preservation Verified. | N/A | |
| There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs | True | |
| Containers requiring zero headspace have no headspace or bubble is <6mm (1/4"). | N/A | |
| Multiphasic samples are not present. | True | |
| Samples do not require splitting or compositing. | True | |
| Residual Chlorine Checked. | N/A | |

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